

### REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-10 and 15-53 are pending in the present action. Claims 1-5, 7, 9-10 and 15-52 are currently withdrawn. No new matter has been added.

By way of summary, the Official Action presents the following issues: Claims 6-8 and 53 stand rejected under 35 U.S.C. §102 as being unpatentable over Patel (U.S. Patent No. 6,591,364).

### Information Disclosure Statement

**Applicants respectfully direct the Examiner's attention to the Information Disclosure Statement (IDS) filed September 6, 2005. Applicants note that this IDS has yet to be indicated as considered by the Examiner. As such, Applicants respectfully request that the Examiner provide an initialed form 1449 in the next communication.**

### Rejection Under 35 U.S.C. §102

The Official Action has rejected Claims 6-8 and 53 under 35 U.S.C. §102 as being unpatentable over Patel. The Official Action contends that Patel describes all of the Applicants' claimed features. Applicants respectfully traverse the rejection.

Applicants' Claim 6 recites, *inter alia*, an information processing apparatus for reciprocal authentication with another information processing apparatus to execute pre-set processing, including:

... receiving means for receiving a key category, a random number, and a device ID from said another information processing apparatus;

selection means for selecting the processing for reciprocal authentication being executed from one or more reciprocal authentication procedures in keeping with said pre-set processing;

reciprocal authentication means for executing the selected reciprocal authentication procedures by said selection means based on the key category; and

key creation means for establishing a common key shared with said another information processing apparatus based on the key category and device ID. (emphasis added)

Patel describes a method for establishing session key agreement between a mobile device and a visiting location register (VLR). In operation, a mobile device (20) communicates with VLR to establish a session key.<sup>1</sup> The VLR generates a random number  $R_n$  using a random number generator, and sends the random number  $R_n$  to the mobile (20) as a challenge along with a call termination request. The call termination request corresponds to typed data which represents the type of protocol being performed. The types of protocols include, for example, call termination, call origination mobile registration, etc.<sup>2</sup> In response, the mobile (20) generates a count value  $C_m$ , and performs a KCF on the random number  $R_n$ , the count value  $C_m$ , typed data, and ID data zero using the SSDA as the key. The mobile (20) then sends count value  $C_m$  and  $KCF_{SSDA}(\text{type, zero, } C_m, R_n)$  to the network. Because the VLR initiated the current call termination protocol including the protocol for establishing a session key, the VLR knows the type data.<sup>3</sup>

Conversely, Applicants invention is directed toward a reciprocal authentication processing in which a common key is shared between two devices in accordance with a key source category. As shown more specifically in Figs. 38 and 39 of Applicants' specification, a portable device (6) negotiates with a second device via a reciprocal authentication processing in which a key category number (G), a random number and device ID are utilized to generate a transient key (Ks).<sup>4</sup> In this manner, a more secure authentication processing is

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<sup>1</sup> See Patel at Figure 2.

<sup>2</sup> Patel at column 3, lines 59-65.

<sup>3</sup> Patel at column 3, line 66 to column 4, line 3.

<sup>4</sup> Application at pages 108-110.

configured to prevent unauthorized copying. Patel does not disclose or suggest reciprocal authentication including receiving a key category, a random number and a device ID from another information processing apparatus for generating a common key as recited in Applicants' Claim 6 and any claim depending therefrom.

Simply stated, Patel's type data does not represent a key category, but instead, the protocol being performed such as call termination, call origination, mobile registration, etc.<sup>5</sup> Additionally, Patel does not disclose or suggest selecting a reciprocal authentication procedure in accordance with a key category as recited in Applicants' Claim 6 or any claim depending therefrom.

As independent Claims 7, 8 and 53 recite substantially similar limitations to that discussed above, Applicants respectfully submit that these claims are likewise allowable over the cited reference.

Accordingly, Applicants respectfully request that the rejection of Claims 6-8 and 53 under 35 U.S.C. §102 be withdrawn.

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<sup>5</sup> Patel at column 3, lines 61-63.

CONCLUSION

Consequently, in view of the foregoing remarks, it is respectfully submitted that the present application, including Claims 6-9 and 53, is patentably distinguished over the prior art, in condition for allowance, and such action is respectfully requested at an early date.


Respectfully submitted,

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